



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,448	02/25/2002	Charles E. Perkins	08212/100S034-US1	6051
38879	7590	08/30/2006	EXAMINER	
DARBY & DARBY P.C. P.O. BOX 5257 NEW YORK, NY 10150-6257			NALVEN, ANDREW L	
			ART UNIT	PAPER NUMBER
			2134	

DATE MAILED: 08/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/083,448

Applicant(s)

PERKINS ET AL.

Examiner

Andrew L. Nalven

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-2 and 4-19.

Allowable Subject Matter

2. The indicated allowability of claims 3, 6-9, and 14-18 is withdrawn in view of the newly discovered reference(s) to Fehnel US Patent No. 5,887,251, Holcman US Patent No. 6,594,489, and Marcovici "Global Authentication. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 10-13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fehnel US Patent No. 5,887,251 in view of Holcman US Patent No. 6,594,489 and Marcovici "Global Authentication."
4. With regards to claims 1, 10-11, and 19, Fehnel teaches sending a random number to a mobile node wherein the random number is generated local to the mobile

node, wherein the random number is generated by a base station (Fehnel, column 7 lines 40-42), generating a mobile node signature using the mobile node, wherein the mobile node signature is generated using the random number (Fehnel, column 7 lines 43-62), and authenticating the mobile node to a network (Fehnel, column 7 lines 50-62). Fehnel fails to teach the network being a GPRS network and authenticating the network to the mobile station. However, Holcman teaches a GPRS network involved in authentication using random numbers (Holcman, column 8 lines 34-60, column 11 lines 24-38). Further, Marcovici teaches a method for strong authentication including the step of authenticating the network to the mobile station (page 5, section 4.1.1, particularly step e) for the purpose of enhancing the security of both ANSI-41 and GSM/GPRS authentication protocols (page 1, section 1). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the method of Fehnel with the teaching of Holcman and Marcovici authentication in a GPRS network and for authenticating the network to the MN. One would be motivated to do so in order to enhance security and provide GPRS services over an ANSI-41 network infrastructure (Marcovici, page 2 section 1).

5. With regards to claims 2, 12, Fehnel as modified teaches sending the mobile node signature to an authentication server and verifying by the authentication server the mobile node signature (Macrovinci, page 5 section 4.1.1).

6. With regards to claim 4, Fehnel as modified teaches generating an authentication signature by the authentication server and sending the authentication signature to the mobile node (Macrovinci, page 5 section 4.1.1).

7. With regards to claims 5, 13, Fehnel as modified teaches the mobile station verifying the authentication signature (Macrovinci, page 5 section 4.1.1, step e).

8. Claims 6-9 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fehnel US Patent No. 5,887,25, Holcman US Patent No. 6,594,489, and Marcovici "Global Authentication," as applied to claim 5 above, and in further view of Grob et al US Patent No. 6,894,994.

9. With regards to claims 6, 14, Fehnel as modified fails to teach the authentication server being a home authentication server. However, Grob teaches teach the authentication server being a home authentication server (Grob, column 12 lines 30-44). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Grob's method of using a home authentication server because it offers the advantage of providing an industry standard protocol for authentication using the RADIUS protocol (Grob, column 2 lines 54-60).

10. With regards to claims 7, 15, Fehnel as modified teaches sending the mobile node signature to a local authentication server wherein the local authentication server is located in a foreign domain and forwards the signature to the home authentication server (Grob, column 12 lines 30-44).

11. With regards to claims 8-9, 17-18, Fehnel as modified teaches determining when the mobile node signature and authentication signature are not verified (Fehnel, column 7 lines 54-62).

Art Unit: 2134

12. With regards to claim 16, Fehnel as modified teaches the AAAH configured to send the authentication signature to the AAAF and the AAAF is configured to send the authentication signature to the mobile node (Grob, column 12 lines 30-44, Fehnel, column 7 lines 54-62).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L. Nalven whose telephone number is 571 272 3839. The examiner can normally be reached on Monday - Thursday 8-6, Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on 571 272 6962. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2134

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andrew Nalven

AN

Jacques Louis Jacques
JACQUES LOUIS JACQUES
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100